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LE, KHANH H				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@wavsip.com

Office Action Summary

Application No.

10/699,631

Applicant(s)

SAENZ, JAVIER

Examiner

KHANH H. LE

Art Unit

3688

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/10/2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 21-22, 24-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 21-22, 24-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-945)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/10/2011 has been entered. Claims 1-9 and 21-22, 24-33 were and remain pending. Independent claims 1 (method) and 21(system) have been amended.

Claim Rejections - 35 USC § 112

2a. The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2b. **Claims 1-9 and 21-22, 24-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 1:

The scope of the claim is unclear.

a) It is not clear who or what is doing the “causing”. That is, “causing to display” may just mean telling someone to use a display device to display or simply providing the display

device thereby causing the subsequent display. It can also mean the server “causing” all the subsequent actions.

b) Further as to the 5 steps performed by the central server, recited at the end of the claim, it is not clear whether the claim includes the operations of the server or not as actual steps of the method. Thus there are 2 possible interpretations of the scope of claim 1:

1) the claim consists only of the “causing” steps (“resulting from” after “recommendation” sounds like all the operations of the server happened in the past, before the claim started so the claim just covers the “causing” steps, thus the claim does not include the operations of the server, in other words, these steps are considered outside the scope of the claim);

2) the claim recites the “causing” and also the steps performed by the server.

Since the claim is subject to several divergent interpretations as discussed above in a) and b), it is indefinite.

Claims 2-9, dependents of claim 1, are rejected based on their dependency to claim 1.

Claim 21: “said recommendation resulting from the server” ..performing the 5 steps is unclear. The claim could be construed as claiming the 5 steps performed by the server which amounts to claiming steps in a system claim, resulting in improper mixing of statutory classes. See MPEP 2173.05 (p)(II).

Further the claim uses functional language that poses an indefiniteness issue: the server is just recited up at the start of the claim with no specific structure or implication of structure to do the functions recited at the end of the claim. Thus, falling into this issue :....“For example, when claims merely recite a description of a problem to be solved or a function or result achieved by the invention, the boundaries of the claim scope may be unclear.”

See Supplementary Examination Guidelines for Determining Compliance With 35 U.S.C. 112 and for Treatment of Related Issues in Patent Applications, A Notice by the Patent and Trademark Office on 02/09/2011, at <http://www.gpo.gov/fdsys/pkg/FR-2011-02-09/pdf/2011-2841.pdf>, relevant part excerpted below (bold emphasis added):

“..A. Indeterminate Terms

1. Functional Claiming: A claim term is functional when it recites a feature “by what it does rather than by what it is.” [15] There is nothing intrinsically wrong with the use of such claim language. [16] In fact, § 112, ¶ 6, expressly authorizes a form of functional claiming (means-plus-function claim limitations discussed in ILC. below). Functional language may also be employed to limit the claims without using the means-plus-function format. [17] Unlike means-plus-function claim language that applies only to purely functional limitations, [18] functional claiming often involves the recitation of some structure followed by its function. For example, in *In re Schreiber*, the claims were directed to a conical spout (the structure) that “allow[ed] several kernels of popped popcorn to pass through at the same time” (the function). [19] As noted by the court in *Schreiber*, “[a] patent applicant is free to recite features of an apparatus either structurally or functionally.” [20] Show citation box

Notwithstanding the permissible instances, the use of functional language in a claim may fail “to provide a clear-cut indication of the scope of the subject matter embraced by the claim” and thus be indefinite. [21] For example, when claims merely recite a description of a problem to be solved or a function or result achieved by the invention, the boundaries of the claim scope may be unclear. [22]....”

Claims 22, 24-33, dependents of claim 21, are rejected based on their dependency to claim 21.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3a. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3b. Claims 1-9 are rejected under 35 U.S.C. 101:

Based upon consideration of all of the relevant factors with respect to the claim as a whole, (see “Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of *Bilski v. Kappos*”, issued by the USPTO, July 27, 2010), claim(s) 1 is held to claim an abstract idea, and is/are therefore rejected as ineligible subject matter under 35 U.S.C. 101. The rationale for this finding is explained below:

As discussed above (see paragraph 2b), “causing to display” may just mean telling someone to use a display device to display or simply providing the display device thereby causing the subsequent display. So no machine has in fact been used. The action claimed is “causing to display” not “displaying” thus the patron database and the server are interpreted as being all outside the scope of the actions of “causing”. **Further there is no transformation** (in which an article has changed to a different state or thing, e.g., objectively changes into a different function or use) takes place either. Note that purely mental processes in which thoughts or human based actions are “changed” have not been considered an eligible transformation. Further, **for data, mathematical manipulation per se has not been deemed a transformation. Here, at most it is such ineligible manipulation of data. The transformation of electronic data here cannot be said to have transformed the nature of the data such that it has a different function or is suitable for a different use, that would make the claim eligible under 35 U.S.C. 101, based on court precedents.**

Therefore the steps describe an abstract idea, and claim 1 is therefore ineligible subject matter under 35 U.S.C. 101.

3c. Dependent claim(s) 2-9 when analyzed as a whole are held to be patent ineligible under 35 U.S.C. 101 because the additional recited limitation(s) fail(s) to establish that the claim(s) is/are not directed to an abstract idea, as detailed below:

Again all steps can be done manually. **Further there is no transformation** (in which an article undergoes a change in state or thing, e.g., objectively changes into a different function or use) takes place either.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5a. Claims 1, 5-9, and 21, 27- 33 are rejected under 35 U.S.C. 103(a) as being unpatentable Walker 20030027635 in view of Pierce US 6332126.

Independent claims 1, 21 and dependent claims 8, 9, and 28:

Walker, in the gaming and offers arts, discloses:

A computer-implemented patron award system for a gaming establishment comprising:
a) a hand-held display device the use of which is limited to operators of the gaming establishment (e.g. Figure 1 item 140: representative device; Fig 5 item 570; 580; [0046]; [0076])

with first interface and said second interface on the display device,

wherein said first interface comprises a visual indicator to display a location of a first patron rendered on the **floor diagram** of said gaming establishment ([0186]: map of casino on rep device);

wherein said second interface displays, information indicating at least one recommendation of a first award from the matched awards to offer to ones said first patron ([0114] last 4 lines) **the server provides list of offers matched to particular players, subject to override by representative**);

b) a patron database comprising:
stored **patron information** relating to each of a plurality of patrons
and

historical transaction information involving said plurality of patrons (e.g. Figure 4 item 455 and associated text; Figure item 580 “likes to play golf” reads on patron characteristics or profiles; e.g. [0159]; e.g. Figure 5 item 580 “staying at hotel”); and

observed preference data, said observed preference data (i) representing **patron behavior observed** in the gaming establishment for at least a first patron of said plurality of patrons (e.g. Figure 5 item 580 “staying at hotel” reads on collection of the claimed observed as well as current or “*substantially real time*” transaction activity information) **for a period of time specified by the operator** (e.g. Figure item 580 “last 10 spins have been losing outcomes” reads on **a period of time specified by the operator**; e.g. [0159]);[0048]: representative can view player’s profiles (e.g. “hobbies”) and **update player’s profiles via her PDA**, e.g. as to acceptance of offers reads on substantial real time gathering of profile data) ;and

(ii) comprising at least one of a gaming preference based on observed time played or actual win or theoretical win (e.g. Figure item 580 “last 10 spins have been losing outcomes” reads on **monitoring actual winnings or losses and observed time played**; [0076] teaches

offers made to : “(v) a player who appears to be frustrated by a winning streak by a casino dealer (such as a blackjack dealer who has not busted for a very long time or has been achieving a total of twenty one), i.e. teaches offers made based on an observed time played at blackjack table within the casino, and actual wins or losses; [0058] data collected on a user may be based on “any other desired time period” determined by the operator.

Player database may further include any other data related to a player, including but not limited to (i) amount lost or won in the current gaming session; (ii) amount won or lost during this stay at the casino, during this vacation or during any other desired time period; and (iii) activities performed during his stay at a casino);

and a restaurant preference based on observed restaurant patronage (Walker at [0081] teaches offer triggers: ” Triggers may also comprise other activities performed by the player. ... purchases a meal at a restaurant associated with the casino”. “Purchases a meal at a restaurant associated with the casino reads on a type of meal selected, e.g. a pizza bought at a pizzeria associated with the casino; the behavior at the restaurant is inherently collected in order to match the offer thereto);

and

c) a server unit operatively connected to said patron database and said current activity database, said central server including:

a processor and a memory associated with said processor,
wherein said memory further includes:

a profile assignment module executable by said processor, said profile assignment module being disposed to regularly assign (i.e. update) profiles to said plurality of patrons (e.g. Figure 4 item 455 and associated text; Figure item 580 “likes to play golf” reads on patron characteristics or profiles; e.g. [0159]);[0048]: representative can view

player's profiles (e.g. "hobbies") and **update player's profiles via her PDA**, e.g. as to acceptance of offers;

an award matching module executable by said processor, said award matching module operating to match awards to ones of said profiles **[[0114] last 4 lines: server provides list of offers matched to particular players**, subject to override by representative);

logic executed by the processor designed or configured to,

based upon at least the historical transaction information related to the plurality of patrons and said substantially current transaction activity of said plurality of patrons, provide the matched awards to a first patron (of said plurality of patrons assigned to said ones of said profiles) (e.g. **[0092]**); and **display on mobile representative device with 1st and 2nd interface as discussed above**).

d) said server further configured for :

a) evaluating substantially real-time transaction activity of said first patron (inherent from citations above when discussing the database);

b) generating a profile for said first patron based at least upon portions of said historical transaction information pertinent to said first patron, said substantially real-time transaction activity, and said observed preference data (citations above when discussing the database: note that the employee evaluates real-time behavior of the customer and updates the server database thus the profile is generated based on those 3 data) ;

c) matching two or more awards to said profile (citations above) ;

d) **matching awards for each** said first patron based upon (i) **the historical transaction information and (ii) the observed preference data** (citations above when discussing the database); and

e) sorting the two or more awards according to the respective likelihoods of acceptance.

f) generating data for generating a floor diagram of the gaming establishment including a relative position and an arrangement of gaming devices and gaming tables within the gaming establishment (inherent in order to generate the map shown to the representative device, see paragraph [0186]).

Other Relevant excerpts and observations:

(Note that Walker also teaches (at [0114] last 4 lines) the server provides list of offers matched to particular players, subject to override by the representative. Since the representative is on the floor and can observe the player before making the offer, see e.g. [0076], her selection of which offer reads on sorting the list of matched suggestions according to a likelihood of acceptance.

“Observed preference data “, is taken as observed by casino personnel, Walker at [0110] teaches using adding the casino personnel insight to other tracked data to “advantageously cooperate to determine which offers to provide to players” (Walker [0110]).
;” a representative **who interacts with a player is capable of more thoroughly understanding the preferences of that player.** Thus, in one embodiment representatives and the central computer can advantageously cooperate to *determine which offers to provide to players”*

(Walker [0110]:

“ There may be advantages to having a representative assist in selecting an offer to present to a player. Even exceptionally designed

computer systems are generally not as adept at interpreting player preferences, feelings, and moods as are people, especially certain types of people. In general, a representative would be capable of more readily determining player preferences, feelings, and moods. Therefore, a representative, especially a well-trained representative, may be able to ascertain or interpret information that an unaided central computer could not. Further, over time a representative **who interacts with a player is capable of more thoroughly understanding the preferences of that player**. Thus, in one embodiment representatives and the central computer can advantageously cooperate to *determine which offers to provide to players*")

Note also that the databases or other apparatus or devices do not know whether the data are "observed" or not.

In Walker the system generates "recommendations" only since they are subject to override by floor staff.

As to sorting matched offers based on the likelihood of acceptance wherein the matched offers are based on observed preference data collected during a time period specified by an operator, Walker teaches at [0058] data collected on a user may be based on "any other desired time period".

(Walker, [0058] Player database may further include any other data related to a player, including but not limited to (i) amount lost or won in the current gaming session; (ii) amount won or lost during this stay at the casino, during this vacation or **during any other desired time period**; and (iii) activities performed during his stay at a casino)

Walker discloses matching offers based on historical transaction information and observed preference data (citations above) however does not specifically disclose:

d) determining for each of the awards a respective likelihood of acceptance by said first patron based thereupon and

e) sorting the two or more awards according to the respective likelihoods of acceptance.

However Pierce, in the same computer-based targeted discount and incentives art, discloses consumer transaction histories used to match qualified consumers to targeted merchant discount offers. Offers are automatically prioritized based on their expected value to consumers and consumers receive the highest priority offers for which they qualify. (abstract; col. 2 lines 34-37). **The default prioritization can be altered or overridden by the merchants system (abstract).** Pierce also discloses, after matching offers to consumers, automatically notifying them of the best offers for which they qualify (col. 4 lines 55-57; Figure 1.8). **In doing so, Pierce discloses the goal is to offer patrons the offers in which they will be most interested (Pierce, col. 2 lines 18-24).**

The offers prioritizing in Pierce reads on offers sorting as claimed, (i.e. in order of importance).

Since Pierce teaches patrons will be most interested in these offers, Peirce thus discloses "sorting the two or more awards according to a likelihood of the first patron accepting each award" as claimed because logically patrons would be likely to accept what they are "most interested" in.

Thus it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add the above Peirce's teaching of prioritizing offers to Walker to offer patrons the best offers in which they will be most interested (Pierce, col. 2 lines 18-24).

Claim 5 (dependent of claim 1):

Neither Walker nor PEIRCE explicitly disclose wherein said matching includes considering award preferences of said patron or plurality of patrons. However since one usually is more receptive to offers that one likes, it would have been obvious to add to Walker an offer based on the consumer preferences to increase the odds that the offer would be accepted.

Claim 6 (dependent of claim 1):

Walker further discloses wherein said matching further includes considering current conditions (citations above). (Note "current conditions" also reads on current activities of the customers, which as stated in discussions of previous claims above, determine level of awards as points and/or comps).

Claim 7 (dependent of claim 5):

Walker discloses matching awards based on customers preferences and further monitors customers reactions to offers (redemptions) for analysis to better target subsequent offers (citations above).

Claims 27 and 29 (dependent of claim 1 or 24):

Walker discloses wherein said server logic is further designed or configured to generate a script containing information that describes how to deliver said first award to said first patron and wherein said logic is further configured to output said script to the display device (e.g. [0076]; [0168]: "prompts" reads on scripts) .

Claims 30-33:

Official Notice is taken that it is old and well-known to match offers based on time of day, (e.g. offering a free coffee at breakfast time because the offer is timely and more likely to be

accepted; see e.g. Lonsbury US 20050267804 at [0014] : coupons dispensed based on time of day). Thus it would have been obvious to add the above old and well-known facts to the system of PIERCE AND WALKER to allow making timely and more likely to be accepted offers.

As to observed location of a patron within a business establishment or observed time played by a patron at a location within the gaming establishment (**for claims 31-33**), Walker at [0076] teaches offers made to : “v) a player who appears to be frustrated by a winning streak by a casino dealer (such as a blackjack dealer who has not busted for a very long time or has been achieving a total of twenty one), i.e. teaches offers made based on an observed time played at blackjack table within the casino).

As to observed preference data includes an observed meal type selected by a patron, Walker at [0081] teaches offer triggers: ” Triggers may also comprise other activities performed by the player. ...purchases a meal at a restaurant associated with the casino”. “Purchases a meal at a restaurant associated with the casino reads on a type of meal selected, e.g. a pizza bought at a pizzeria associated with the casino). Thus this reads on making offers based on observed behaviors thus making them more likely to be accepted.

5b. Claims 2-4, 22, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker in view of Pierce US 6332126 and further in view of Boushy et al. US 6003013.

The limitations of the following claims may be disclosed in Walker. If not, they are disclosed by Boushy et al. US 6003013.

In the same gaming and offers art, BOUSHY discloses:

A computer-implemented method and system for selecting awards to be offered to patrons of an establishment (abstract), the method comprising:

maintaining a **patron database** storing patron information relating to a plurality of patrons and historical transaction information involving said patrons (abstract; col. 9 lines 52-67; Fig 3 item 212;) connected to a **central server unit** (fig. 1 items 112 , 114 and associated text: database server; marketing server; Fig 2A: components of server 112) with **a processor and a memory** (inherent)

monitoring substantially current transaction activity of said plurality of patrons (abstract: updated customer accounts; Figures 3 and 4 and associated text) and storing in **current activity database**;

regularly assigning a profile (i.e. assigning then updating the profile) to said first patron (col. 5 lines 21-24; col. 10 lines 54-61), by a profile assignment module executable by said server processor, based at least upon portions of said historical transaction information pertinent to said first patron and said substantially real time or current transaction activity (abstract; col. 9 lines 52-67; also col. 9 line 67 to col. 10 line 2);

by an award matching module executable by said server processor, matching 2 or more awards to ones of said profiles (abstract, last line); and

offering said one or more awards to ones of said plurality of patrons assigned to said ones of said profiles (abstract, last line; Figure 4; Fig. 4 item 454 and associated text).

(Note: Boushy also discloses

generating and receiving a script containing information relating to conveyance of awards (e.g. col. 12 lines 8-12: the number of points, based on an newly determined status, is determined ; this information about the points to be offered to customer is the script);

BOUSHY further discloses wherein said historical transaction information is reflective of prior participation of said plurality of patrons in gaming activity managed by said business establishment (abstract) and (claim 20) wherein said profile is selected as a function of

participation of said first patron in said gaming activity and in current gaming activity (abstract: updated profile; col. 9 lines 55-67).

Boushy discloses several offers based on updated profiles but **does not specifically disclose** “*based upon at least the historical transaction information involving said patrons including the first patron and the current transaction activity of at least the first patron, sorting the two or more awards according to a likelihood of the first patron accepting each award; and outputting, based upon said sorting, at least one recommendation of an award to offer to the first patron.*”

It would have been obvious to modify Walker in view of Pierce with the following details of Boushy, since both are in the same gaming art and for the purposes of, e.g. to ease matching of offers based on a systematic categorization of a user profile into a set of known profiles. This motivation to combine applies to all of the claims below.

Claims 2, 22 (dependent of claim 1 or 21):

Official Notice is taken that defining a plurality of profiles associated with a corresponding plurality of profile valuations, and selecting awards based on such profile from said plurality of profiles is old and well-known (see e.g. **BOUSHY** (col. 9 lines 52-67: e.g. VIP customers). Thus it would have been obvious to a skilled artisan at the time of the invention to add such to the system of Walker and Pierce so to ease matching of offers based on a categorization of profiles.

Claims 3, 24, 26 (dependent of claim 1 or 21):

Walker further discloses defining a plurality of awards, said matching further including selecting said award from said plurality of awards based upon a profile valuation of said profile and a value of said award services for special status customers ; otherwise, **BOUSHY** so

discloses (abstract: distinguished (i.e. more valuable) services for special status (i.e. is higher valuation) customers; col. 12 lines 8-12, 20-22: different levels of points; col. 12 lines 50-55: different levels of comps).

Claims 4, 25 (dependent of claim 1 or 24):

BOUSHY further discloses wherein said profile is characterized by a profile valuation (col. 9 line 2 to col. 10 line 2 : VIP or Premier customers profiles, “worth to the casino” or “theoretical win value” read on profile valuations). Boushy also discloses awards commensurate with customers’ expenditures and her worth to the casino (e.g. based on her “theoretical win value” to the casino) (col. 14 lines 9-25).

However BOUSHY does not specifically disclose said award matched to said profile is being valued at less than or equivalent to said profile valuation.

However, businesses are not in the business to lose money. Since giving awards values higher than what the business can make of the customer (e.g. based on her “theoretical win value” to the casino) is losing money, it would have been obvious to the skilled artisan to add to the combination of BOUSHY in view of PEIRCE and Walker to give an award matched to said profile being valued at less than or equivalent to said profile valuation only, for the above stated goal. Giving more would be inconsistent with Boushy’s goal of giving “commensurate awards” (col. 14 lines 22-24).

Alternate rejection:

6. Claims 1-9, and 21-22, 24-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boushy et al. US 6003013 in view of Pierce US 6332126 and Walker 20030027635.

Independent claims 1, 21 and dependent claims 8, 9, and 28:

BOUSHY discloses all the details as above discussed.

As stated in the last Office Action,

“(Note: Boushy also discloses generating and receiving a script containing information relating to conveyance of awards (e.g. col. 12 lines 8-12: the number of points, based on an newly determined status, is determined ; this information about the points to be offered to customer is the script);

BOUSHY further discloses wherein said historical transaction information is reflective of prior participation of said plurality of patrons in gaming activity managed by said business establishment (abstract) and (claim 20) wherein said profile is selected as a function of participation of said first patron in said gaming activity and in current gaming activity (abstract: updated profile; col. 9 lines 55-67).

Boushy discloses several offers based on updated profiles but does not specifically disclose “based upon at least the historical transaction information involving said patrons including the first patron and the current transaction activity of at least the first patron, **sorting the two or more awards according to a likelihood of the first patron accepting each award; and outputting, based upon said sorting, at least one recommendation of an award to offer to the first patron.”**

However Pierce, in the same computer-based targeted discount and incentives art, **discloses consumer transaction histories used to match qualified consumers to targeted merchant discount offers. Offers are automatically prioritized based on their expected value to consumers and consumers receive the highest priority offers for which they qualify.** (abstract; col. 2 lines 34-37). **The default prioritization can be altered or overridden by the merchants system (abstract).** Pierce also discloses, after matching offers

to consumers, automatically notifying them of the best offers for which they qualify (col. 4 lines 55-57; Figure 1.8). In doing so, Pierce discloses the goal is to offer patrons the offers in which they will be most interested (Pierce, col. 2 lines 18-24).

The offers prioritizing in Pierce reads on offers sorting as claimed, (i.e. in order of importance, see definition per [http:// dictionary.reference.com/browse/prioritize](http://dictionary.reference.com/browse/prioritize), printout provided with the last Office Action). Since Pierce teaches patrons will be most interested in these offers, Pierce thus discloses "sorting the two or more awards according to a likelihood of the first patron accepting each award" as claimed because logically patrons would be likely to accept what they are "most interested" in.

Thus it would have been obvious to a person having ordinary skill in the art at the time the invention was made (herein a "PHOSITA") to add the above Peirce's teaching of prioritizing offers to Boushy to offer patrons the best offers in which they will be most interested (Pierce, col. 2 lines 18-24).

The combination of BOUSHY in view of PEIRCE does not explicitly disclose recommendations. However Pierce's notifying of the best prioritized offers reads on recommendations. This is because the system or system operators can override the default prioritization (see abstract), thus this prioritized list only acts as a list of suggestions or recommendations of offers to present to the consumer. The motivation to add this limitation of Pierce to Boushy is to allow some degree of flexibility to the system operator in making the offers.

Further it would have been obvious to combine the recommendations of Peirce to Boushy since the claimed invention is merely a combination of old elements (recommendations of offers of Pierce and offers made in Boushy), and in the combination each element merely would have performed the same function as it did separately (i.e. the offers would just have been recommended instead of being imposed), and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

In view of the level of skill in the art evidenced by Boushy and Pierce a skilled artisan would have known to incorporate the data manipulations taught by Pierce as to the generation of offers and best recommendations into the system of Boushy to obtain recommendations being generated by the central server in Boushy.

Boushy and Pierce do not disclose: a hand-held display device with its attendant features.

However Walker, in the same gaming and offers arts, discloses:

a hand-held display device; server etc... (see above for details)

Thus it would have been obvious to a SKILLED ARTISAN to add the representative device of Walker to Boushy and Pierce to provide another convenient method of displaying offers to patrons, by mobile service attendants, as taught by Walker. In this case, it would have been obvious that the sorted and matched offers or recommendations as taught by Walker and Pierce would also have been displayed. (Note that Walker also teaches (at [0114] last 4 lines) the server provides list of offers matched to particular players, subject to override by representative. Since the representative is on the floor and can observe the player before making the offer, see e.g. [0076], her selection of which offer reads on sorting the list of matched suggestions according to a likelihood of acceptance. Since Walker teaches displaying the manual sort on the device, while Pierce teaches sorting automatically, it would have been obvious, in the system of Boushy, Pierce and Walker, to display the automatic sort on the Walker's device). It would have been obvious to a skilled artisan to add the mapping functionality of the representative device of Walker and its necessary mapping data generation to Boushy and Pierce so to provide the useful customer location function as taught by Walker.

As stated in the last Office Action, it would have been obvious to a skilled artisan to add the various WALKER teachings to the BOUSHY, PIERCE AND WALKER system to

allow adding the casino personnel insight to other tracked data to “advantageously cooperate to determine which offers to provide to players” (Walker [0110]).

As to sorting matched offers based on the likelihood of acceptance wherein the matched offers are based on observed preference data collected during a time period specified by an operator, Walker teaches at [0058] data collected on a user may be based on “any other desired time period”.

(Walker, [0058] Player database may further include any other data related to a player, including but not limited to (i) amount lost or won in the current gaming session; (ii) amount won or lost during this stay at the casino, during this vacation or **during any other desired time period**; and (iii) activities performed during his stay at a casino)

Thus it would have been obvious to add such teaching to the BOUSHY, PIERCE AND WALKER system to allow monitoring data for any desired time period, by an operator or any other instrumentality, as relevant or needed, for any business purpose. “

As to the new limitations of “ observed preference data, said observed preference data (i) representing patron behavior observed in the gaming establishment for at least a first patron of said plurality of patrons for a period of time specified by the operator and (ii) comprising at least one of a gaming preference based on observed time played or actual win or theoretical win and a restaurant preference based on observed restaurant patronage”;, those are disclosed in Walker as discussed above. See the alternate rejection with Walker as main reference.

Further as acknowledged by Applicant Boushy’s system collects substantially real time data from a user card (Boushy 2:23-41) thus Boushy’s computer evaluates the substantially real time data to update the profiles.

Thus Boushy PIERCE AND WALKER discloses:

b) generating a profile for said first patron based at least upon portions of said historical transaction information pertinent to said first patron, said substantially real-time transaction activity, and said observed preference data;

(Note again that the databases or other apparatus or devices do not know whether the data are “observed” or not).

Thus, Boushy PIERCE AND WALKER also discloses:
said recommendation resulting from the central server:

a) evaluating substantially real-time transaction activity of said first patron;

b) generating a profile for said first patron based at least upon portions of said historical transaction information pertinent to said first patron, said substantially real-time transaction activity, and said observed preference data;

c) matching two or more awards to said profile;

d) **determining for each of the awards a respective likelihood of acceptance** by said first patron based upon (i) **the historical transaction information and the observed preference data**; and

e) sorting the two or more awards according to the respective likelihoods of acceptance.

Claims 30-33:

Official Notice is taken that it is old and well-known to match offers based on time of day, (e.g. offering a free coffee at breakfast time because the offer is timely and more likely to be

accepted; see e.g. Lonsbury US 20050267804 at [0014] : coupons dispensed based on time of day). Thus it would have been obvious to add the above old and well-known facts to the system of BOUSHY, PIERCE AND WALKER to allow making timely and more likely to be accepted offers.

Claims 31-33:

As to observed location of a patron within a business establishment or observed time played by a patron at a location within the gaming establishment , Walker at [0076] teaches offers made to : “(v) a player who appears to be frustrated by a winning streak by a casino dealer (such as a blackjack dealer who has not busted for a very long time or has been achieving a total of twenty one), i.e. teaches offers made based on an observed time played at blackjack table within the casino).

As to observed preference data includes an observed meal type selected by a patron, Walker at [0081] teaches offer triggers: ” Triggers may also comprise other activities performed by the player. ...purchases a meal at a restaurant associated with the casino”, “Purchases a meal at a restaurant associated with the casino reads on a type of meal selected, e.g. a pizza bought at a pizzeria associated with the casino).

Thus it would have been obvious to add the above-discussed offer triggers taught by Walker to the system of BOUSHY, PIERCE AND WALKER to allow making offers based on observed behaviors thus making them more likely to be accepted.

Claims 2, 22:

The combination of BOUSHY in view of PEIRCE and Walker discloses a method and/or system as in claims 1, or 21 above and BOUSHY further discloses defining a plurality of profiles associated with a corresponding plurality of profile valuations, said assigning further including selecting said profile from said plurality of profiles.
(col. 9 lines 52-67: e.g. VIP customers).

Claims 3, 24, 26:

The combination of BOUSHY in view of PEIRCE and Walker discloses a method and/or system as in claims 1, or 21 above and BOUSHY further discloses defining a plurality of awards,

said matching further including selecting said award from said plurality of awards based upon a profile valuation of said profile and a value of said award (abstract: distinguished (i.e. more valuable) services for special status (i.e. is higher valuation) customers; col. 12 lines 8-12, 20-22; different levels of points; col. 12 lines 50-55; different levels of comps).

Claims 4, 25:

The combination of BOUSHY in view of PEIRCE and Walker discloses a method and/or system as in claims 1, or 24 above and BOUSHY further discloses wherein said profile is characterized by a profile valuation (col. 9 line 2 to col. 10 line 2 : VIP or Premier customers profiles, “worth to the casino” or “theoretical win value” read on profile valuations). Boushy also discloses awards commensurate with customers’ expenditures and her worth to the casino (e.g. based on her “theoretical win value” to the casino) (col. 14 lines 9-25).

However BOUSHY does not specifically disclose said award matched to said profile is being valued at less than or equivalent to said profile valuation.

However, businesses are not in the business to lose money. Since giving awards values higher than what the business can make of the customer (e.g. based on her “theoretical win value” to the casino) is losing money, it would have been obvious to the skilled artisan to add to the combination of BOUSHY in view of PEIRCE and Walker to give an award matched to said profile being valued at less than or equivalent to said profile valuation only, for the above stated goal. Giving more would be inconsistent with Boushy’s goal of giving “commensurate awards” (col. 14 lines 22-24).

Claim 5:

The combination of BOUSHY in view of PEIRCE and Walker discloses a method and/or system as in claim 1 above and BOUSHY further discloses customer’s preferences are collected (col. 9 lines 54).

But neither BOUSHY nor PEIRCE explicitly disclose wherein said matching includes considering award preferences of said patron or plurality of patrons. However since one usually is more receptive to offers that one likes, it would have been obvious to add to BOUSHY an offer based on the consumer preferences to increase the odds that the offer would be accepted. These personalized awards would enhance the customer's overall experience with the business and the awards process and might make him or her more likely to return, a goal of Boushy (col. 10 lines 49-53).

Claim 6:

The combination of BOUSHY in view of PEIRCE and Walker discloses a method as in Claim 5 above and BOUSHY further discloses wherein said matching further includes considering current conditions (col. 13 lines 29-32). (Note "current conditions" also reads on current activities of the customers, which as stated in discussions of previous claims above, determine level of awards as points and/or comps).

Claim 7:

The combination of BOUSHY in view of PEIRCE and Walker discloses a method and/or system as in claim 5 above of matching awards based on customers preferences and further BOUSHY discloses the system monitors customers reactions to offers (redemptions) for analysis to better target subsequent offers (col.14 lines 43-49 and lines 58-60). Since one is more likely to accept an offer that one likes, accepting a particular award is some indication of one's preference for that award. Thus at col.14 lines 43-49 and lines 58-60, BOUSHY discloses matching awards wherein "the award preferences are based at least in part upon reaction of said first patron to other awards previously offered to said first patron".

Claims 27 and 29:

The combination of Boushy in view of PEIRCE and Walker discloses a method and/or system as in claims 1, or 24 above. BOUSHY in view of PEIRCE does not, but Walker discloses wherein said server logic is further designed or configured to generate a script containing information that describes how to deliver said first award to said first patron and wherein said logic is further configured to output said script to the display device (e.g. [0076]; [0168]: "prompts" reads on scripts) .

Thus it would have been obvious to a skilled artisan to add such functionality to the system of Boushy and PEIRCE to help the representatives make effective offers presentations as taught by Walker.

Response to Arguments

7. Applicant's arguments filed on 02/10/2011 have been fully considered but they are not persuasive.

As before, Applicant argued that the systems of Boushy and Pierce are incompatible. However, despite the long argument, it is not clear exactly why the systems would be incompatible. As stated in the last Office Action, Pierce was only used for the teaching of manipulation of data to target merchant offers using consumer transaction histories, automatically prioritizing the offers based on expected values to the consumer and presenting the best offers to her. As stated before, “[T]his data manipulation teaching can readily be adapted in the Lan /Wan system of Boushy by a skilled artisan. There is no incompatibility just because many merchants are taught in Pierce. Suppose there are only two merchants in Pierce and they are affiliated, e.g. a hotel of a casino and the restaurant of the same casino. Their offers would be the equivalent of both offers being made by the parent casino just as done in Boushy”.

Further on further consideration, in an alternate rejection, Walker has been used as main reference. The combination of Walker and Pierce is just as valid, as for Boushy and Pierce, for the reasons stated above.

8. Interpretation of claims 1 and 21:

As stated in the last Office Action, as to “determining for each of the awards a likelihood of acceptance by said first patron based upon at least on i) historical data and ii) observed preference data, no specific definition is given for “observed preference data “, except as different from “stated” thus the limitation is interpreted as analogous to monitored or tracked or recorded transaction data (because transaction data is an indication of preferences). Further , the specification at [0192] states: “historical preferences (e.g., stated and observed preferences, *and the patron's past refusals and acceptances*)” thus historical preferences include observed preferences thus i) and ii) become based on the observed preferences.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh H. Le whose telephone number is 571-272-6721. The Examiner works a part-time schedule and can normally be reached on Monday-Wednesday 9:00-6:00. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, John Weiss can be reached on 571-272-6812. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-3600. For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314). Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Khanh H. Le/

Primary Examiner, Art Unit 3688